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☐ 1. Document ID: US 6614430 B1

L20: Entry 1 of 12

File: USPT

Sep 2, 2003

US-PAT-NO: 6614430
DOCUMENT-IDENTIFIER: US 6614430 B1
** See image for Certificate of Correction **

TITLE: System and method for the exchange of CAD data

DATE-ISSUED: September 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rappoport; Ari	Jerusalem			IL

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Proficiency Ltd.	Jerusalem			IL	03

APPL-NO: 09/ 391311 [PALM]
DATE FILED: September 7, 1999

PARENT-CASE:
PRIORITY INFORMATION This application claims priority from a U.S. provisional application Ser. No. 60/099,340, filed Sep. 8, 1998, and hereby incorporated by reference.

INT-CL: [07] G06 T 15/00

US-CL-ISSUED: 345/420
US-CL-CURRENT: 345/420

FIELD-OF-SEARCH: 345/419, 345/420, 345/421, 345/619

PRIOR-ART-DISCLOSED:

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<u>5646862</u>	July 1997	Jolliffe et al.	364/488
<u>5717905</u>	February 1998	Iwamoto et al.	395/500
<u>5815415</u>	September 1998	Bentley et al.	364/578
<u>5870588</u>	February 1999	Rompaey et al.	395/500
<u>5945995</u>	August 1999	Higuchi et al.	345/420
<u>6128023</u>	October 2000	Kawashima	345/619

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December 2002

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378/22

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ART-UNIT: 2671

PRIMARY-EXAMINER: Nguyen; Phu K.

ATTY-AGENT-FIRM: Fish & Richardson P.C.

ABSTRACT:

A method and apparatus for mechanical data exchange between parametric computer aided design systems ("CAD"). According to an embodiment, computer-implemented methods, techniques and structures are employed to extract parametric specification data from a source CAD file and create a second parametric-based CAD file for a different CAD system. In one embodiment, an intermediate data structure is utilized. An objective is creation of a second parametric-based CAD file that preserves design intent of the parametric-based source CAD file.

23 Claims, 3 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWD	Draw Desc	Image
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☒ 2. Document ID: US 6453356 B1

L20: Entry 2 of 12

File: USPT

Sep 17, 2002

US-PAT-NO: 6453356

DOCUMENT-IDENTIFIER: US 6453356 B1

TITLE: Data exchange system and method

DATE-ISSUED: September 17, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sheard; Nicolas C.	Palo Alto	CA		
Fischer; Larry J.	Campbell	CA		
Matthews; Richard W.	Redwood City	CA		
Himabindu; Gurla	Sunnyvale	CA		
Hu; Qilin	Mountain View	CA		
Zheng; Wendy J.	Cupertino	CA		

Mow; Boyle Y.

Freemont

CA

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
ADC Telecommunications, Inc.	Eden Prairie	MN			02

APPL-NO: 09/ 060667 [PALM]

DATE FILED: April 15, 1998

INT-CL: [07] G06 F 15/16

US-CL-ISSUED: 709/231

US-CL-CURRENT: 709/231

FIELD-OF-SEARCH: 709/223, 709/315, 709/100, 709/231, 709/230, 709/329, 713/1, 717/10, 717/5, 345/335

PRIOR-ART-DISCLOSED:

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<u>6141691</u>	October 2000	Frink et al.	709/230
<u>6202096</u>	March 2001	Williams et al.	709/227

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ART-UNIT: 2151

PRIMARY-EXAMINER: Courtenay, III; St. John

<http://westbrs:9000/bin/gate.exe?f=TOC&state=dmsa06.22&ref=20&dbname=PGPB,USPT,USOC,EPAB,J...> 6/16/05

ASSISTANT-EXAMINER: Nguyen; Van H.

ATTY-AGENT-FIRM: Schwegman, Lundberg, Woessner & Kluth, P.A.

ABSTRACT:

A system and method for exchanging data between two or more applications includes a data exchange engine and a number of adapters associated with a corresponding number of applications. Each of the adapters is customized to interface with a corresponding application and transforms data being transferred between the application and the data exchange engine. Data produced by a particular application is converted from a technology dependent form to a technology independent form by the corresponding adapter. In one embodiment, the format associated with a data stream is disassociated from the informational content of the data stream by the adapter. The informational content of the data stream is then transformed by the adapter into a common or generic format. The data exchange engine receives data in a technology independent form from each of its associated adapters and coordinates the routing of informational content to particular adapters associated with applications that have requested specific informational content. The adapters receiving the informational content from the data exchange engine transform the informational content having the common format into a data format compatible with, or specific to, their associated applications. A queuing mechanism is employed to construct a reliable asynchronous or pseudo-synchronous interface between disparate applications and systems. The data exchange engine may apply business rules or logic when processing a request for particular informational content. User-specified routing logic may be applied by the data exchange engine to dispatch selected informational content to one or more destination applications.

56 Claims, 23 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RWOC	Draw Desc	Image
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☐ 3. Document ID: US 6298319 B1

L20: Entry 3 of 12

File: USPT

Oct 2, 2001

US-PAT-NO: 6298319

DOCUMENT-IDENTIFIER: US 6298319 B1

TITLE: Incremental compilation of electronic design for work group

DATE-ISSUED: October 2, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Heile; Francis B.	Santa Clara	CA		
Fairbanks; Brent A.	Santa Clara	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Altera Corporation	San Jose	CA			02

APPL-NO: 09/ 383479 [PALM]

DATE FILED: August 26, 1999

PARENT-CASE:

This is a divisional of U.S. patent application Ser. No. 08/957,957 filed on Oct. 27, 1997, which is now U.S. Pat. No. 5,983,277. This application claims priority of provisional U.S.

patent application No. 60/029,277, filed Oct. 28, 1996, entitled "Tools For Designing Programmable Logic Devices" which is incorporated by reference. The present application is related to the following applications filed on the same date herewith: U.S. patent application Ser. No. 08/958,002, now U.S. Pat. No. 6,134,705, naming B. Pedersen et al. as inventors, entitled "Generation Of Sub-Net Lists For Use In Incremental Compilation"; U.S. patent application Ser. No. 08/958,436, now U.S. Pat. No. 6,102,964, naming J. Tse et al. as inventors, entitled "Fitting For Incremental Compilation Of Electronic Designs"; U.S. patent application Ser. No. 08/958,670, now U.S. Pat. No. 6,080,204, naming D. Mendel as inventor, entitled "Parallel Processing For Computer Assisted Design Of Electronic Devices"; U.S. patent application Ser. No. 08/958,626, naming F. Heile et al. as inventors, entitled "Interface For Compiling Design Variations In Electronic Design Environments"; U.S. patent application Ser. No. 08/958,778, now U.S. Pat. No. 6,161,211, naming T. Southgate as inventor, entitled "Method And Apparatus For Automated Circuit Design"; U.S. patent application Ser. No. 08/958,434, now U.S. Pat. No. 6,110,223, naming T. Southgate et al. as inventors, entitled "Graphic Editor For Block Diagram Level Design Of Circuits"; U.S. patent application Ser. No. 08/958,432, now U.S. Pat. No. 6,120,550, naming T. Southgate et al. as inventors, entitled "Design File Templates For Implementation Of Logic Designs"; U.S. patent application Ser. No. 08/958,414, naming T. Southgate as inventor, entitled "Method For Providing Remote Software Technical Support"; U.S. patent application Ser. No. 08/958,777, naming T. Southgate as inventor, entitled "Method For Simulating A Circuit Design"; U.S. patent application Ser. No. 08/958,798, now U.S. Pat. No. 6,026,226, naming F. Heile as inventor, entitled "Local Compilation In Context Within A Design Hierarchy"; U.S. patent application Ser. No. 08/958,435, now U.S. Pat. No. 6,182,247, naming Alan L. Herrmann et al. as inventors, entitled "Embedded Logic Analyzer For A Programmable Logic Device"; and U.S. patent application Ser. No. 08/958,431, naming F. Heile as inventor, entitled "Electronic Design Automation Tool For Display Of Design Profile". The above related applications are incorporated herein by reference in their entireties for all purposes.

INT-CL: [07] G06 F 9/45

US-CL-ISSUED: 703/26; 703/27, 709/215, 716/17, 717/6

US-CL-CURRENT: 703/26; 703/27, 709/215, 716/17, 717/104, 717/120, 717/145

FIELD-OF-SEARCH: 703/20, 703/26, 703/27, 716/17, 717/6, 709/232, 709/215

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
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<u>4827427</u>	May 1989	Hyduke	
<u>4882690</u>	November 1989	Shinsha et al.	
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<u>5473547</u>	December 1995	Muroga	
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<u>5603043</u>	February 1997	Taylor et al.	395/800
<u>5623418</u>	April 1997	Rostoker et al.	
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<u>5661660</u>	August 1997	Freidin	
<u>5670895</u>	September 1997	Kazarian et al.	
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<u>5696454</u>	December 1997	Trimberger	
<u>5712794</u>	January 1998	Hong	
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<u>5812847</u>	September 1998	Joshi et al.	
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<u>6102964</u>	August 2000	Tse et al.	716/18
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<u>6161211</u>	December 2000	Southgate	716/1
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Peter Ramyalal Suraris et al., "A Quadrisection-Based Combined Place and Route Scheme for Standard Cells", IEEE, pp. 234-244, Mar. 1989.

ART-UNIT: 213

PRIMARY-EXAMINER: Teska; Kevin J.

ASSISTANT-EXAMINER: Phan; Thai

ATTY-AGENT-FIRM: Beyer Weaver & Thomas LLP

ABSTRACT:

A work group computing system for facilitating programmable logic device design among multiple engineers has a global work space including design project source files, a compilation basis, a compilation report text file, a binary assignments database and a user-readable assignments text file. Any number of local work spaces contain downloaded versions of any of the project source files, local compilation processing results for that user and a local assignment database containing records of downloaded assignments. Downloaded project source files or assignments are assigned states by the user such as default, locked, owned-write, owned-read only to facilitate coordination amongst the user engineers. The system controls editing of files so that two engineers may not inadvertently edit the same global source file at the same time. Individual engineers receive automatic updates of new versions of source files; files that are being edited are locked, and an isolation mode allows an engineer to work with source files in an unchanging state. Each engineer incrementally compiles local changes made to source files in his own user work space to produce a local set of compilation and processing results. Incremental compilation uses unedited source files, the basis from the global work space, and the user's edited local files to produce the local processing results. Upon satisfactory results, edited source files and local processing results may replace and overwrite global files and results. Multiple engineers are allowed to work on complex logic design that can be implemented on a single, large capacity device.

24 Claims, 21 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RMC	Draw Desc	Image
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☒ 4. Document ID: US 6035297 A

L20: Entry 4 of 12

File: USPT

Mar 7, 2000

US-PAT-NO: 6035297
DOCUMENT-IDENTIFIER: US 6035297 A

TITLE: Data management system for concurrent engineering

DATE-ISSUED: March 7, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Van Huben; Gary Alan	Poughkeepsie	NY		
Mueller; Joseph Lawrence	Poughkeepsie	NY		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
International Business Machines Machine	Armonk	NY			02

APPL-NO: 08/ 847393 [PALM]
DATE FILED: December 6, 1996

INT-CL: [07] G06 F 17/30

US-CL-ISSUED: 707/8; 707/10, 707/203
US-CL-CURRENT: 707/8; 707/10, 707/203

FIELD-OF-SEARCH: 707/8, 707/10, 707/203

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4141078</u>	February 1979	Bridges, Jr. et al.	235/380
<u>5201047</u>	April 1993	Maki et al.	707/4
<u>5280614</u>	January 1994	Munroe et al.	395/677
<u>5287459</u>	February 1994	Gniewek	395/275
<u>5297279</u>	March 1994	Bannon et al.	707/103
<u>5321605</u>	June 1994	Chapman et al.	705/7
<u>5333312</u>	July 1994	Wang	707/10
<u>5333315</u>	July 1994	Saether et al.	707/1
<u>5333316</u>	July 1994	Champagne et al.	707/8
<u>5396616</u>	March 1995	Venable	395/500
<u>5418949</u>	May 1995	Suzuki	707/205
<u>5504885</u>	April 1996	Alashqur	707/4
<u>5515488</u>	May 1996	Hoppe et al.	707/3
<u>5548749</u>	August 1996	Kroenke et al.	707/102
<u>5560005</u>	September 1996	Hoover et al.	707/10
<u>5625404</u>	April 1997	Grady et al.	348/7
<u>5684987</u>	November 1997	Mamiya et al.	707/103
<u>5694598</u>	December 1997	Durand et al.	1/1
<u>5721909</u>	February 1998	Oulid-Aissa et al.	1/1
<u>5737737</u>	April 1998	Hikida et al.	707/3

OTHER PUBLICATIONS

Software Maintenance Features For Library System, IBM System Products Division, Rochester, MN. 1988 IEEE.

Automatic Data Acquisition for VLSA CAD Database Management, University of South Carolina, Columbia, SC. IEEE Proceeding -1989 Southeastcon, Session 11B1.

Design Data Modeling with Versioned Conceptual Configuration, Institute of Information Sciences and Electronics, University of Tsukuba, Tsukuba, Japan. 1989 IEEE.

Relational Databases For SSC Design And Control, SSC Central Design Group, Lawrence Berkeley Laboratory, Berkely, CA. 1989 IEEE.

*Using A Relational Database As An Index To A Distributed Object Database In Engineering Design Systems, Department of Computer Science and Rensselaer Design Research Center, Rensselaer Polytechnic Institute, Troy, NY 1989 IEEE.

Oliver Tegel, "Integrating Human Knowledge Into The Product Development Process" published in Proceedings of ASME Database Symposium Eng-Data Mgmt, Integrating the Engineering Enterprise ASME Database Symposium 1994, ASCE NY USA, pp. 93-100.

"Beyond EDA" published in Electronic Business, vol. 19, No. 6, Jun. 1993, pp. 42-46.

ART-UNIT: 276

PRIMARY-EXAMINER: Amsbury; Wayne

ASSISTANT-EXAMINER: Alam; Shahid

ATTY-AGENT-FIRM: Augspurger; Lynn L.

ABSTRACT:

A data management system for file and database management including a design control system suitable for use in connection with the design of integrated circuits and other elements of manufacture having many parts which need to be developed in a concurrent engineering environment with inputs provided by users and or systems which may be located anywhere in the world providing a set of control information for coordinating movement of the design information through development and to release while providing dynamic tracking of the status of elements of the bills of materials in an integrated and coordinated activity control system utilizing a control repository which can be implemented in the form of a database (relational, object oriented, etc.) or using a flat file system. Once a model is created and/or identified by control information design libraries hold the actual pieces of the design under control of the system without limit to the number of libraries, and providing for tracking and hierarchical designs which are allowed to traverse through multiple libraries. Data Managers become part of the design team, and libraries are programmable to meet the needs of the design group they service. A control repository communicates with users of the design control system for fulfilling requests of a user and with data repositories of said data management control system through a plurality of managers. Each manager performs a unique function. Managers act as building blocks which can be combined in a plurality of manners to support an environment for suitable for multiple users of a user community.

12 Claims, 267 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Image
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☒ 5. Document ID: US 5983277 A

L20: Entry 5 of 12

File: USPT

Nov 9, 1999

US-PAT-NO: 5983277
DOCUMENT-IDENTIFIER: US 5983277 A

TITLE: Work group computing for electronic design automation

DATE-ISSUED: November 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Heile; Francis B.	Santa Clara	CA		
Fairbanks; Brent A.	Santa Clara	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Altera Corporation	San Jose	CA			02

APPL-NO: 08/ 957957 [PALM]
DATE FILED: October 27, 1997

PARENT-CASE:

This application claims priority of provisional U.S. patent application Ser. No. 60/029,277, filed Oct. 28, 1996, entitled "Tools For Designing Programmable Logic Devices" which is incorporated by reference.

INT-CL: [06] G06 F 13/42

US-CL-ISSUED: 709/232; 709/215, 709/226

US-CL-CURRENT: 709/232; 709/215, 709/226

FIELD-OF-SEARCH: 709/226, 709/207, 709/225, 709/232, 709/244, 709/215

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4827427</u>	May 1989	Hyduke	364/489
<u>5051938</u>	September 1991	Hyduke	364/578
<u>5220657</u>	June 1993	Bly et al.	395/425
<u>5333316</u>	July 1994	Champagne et al.	395/600
<u>5367468</u>	November 1994	Fukasawa et al.	364/490
<u>5504885</u>	April 1996	Alashqur	395/600
<u>5519866</u>	May 1996	Lawrence et al.	395/700
<u>5526517</u>	June 1996	Jones et al.	395/600
<u>5544067</u>	August 1996	Rostoker et al.	364/489
<u>5623418</u>	April 1997	Rostoker et al.	364/489
<u>5812416</u>	September 1998	Gupte et al.	364/490
<u>5826265</u>	October 1998	Van Huben et al.	707/8

ART-UNIT: 276

PRIMARY-EXAMINER: Asta; Frank J.

ASSISTANT-EXAMINER: Willett; Stephan

ATTY-AGENT-FIRM: Beyer & Weaver, LLP

ABSTRACT:

A work group computing system for facilitating programmable logic device design among multiple engineers has a global work space including design project source files, a compilation basis, a compilation report text file, a binary assignments database and a user-readable assignments text file. Any number of local work spaces contain downloaded versions of any of the project source files, local compilation processing results for that user and a local assignment database containing records of downloaded assignments. Downloaded project source files or assignments are assigned states by the user such as default, locked, owned-write, owned-read only to facilitate coordination amongst the user engineers. The system controls editing of files so that two engineers may not inadvertently edit the same global source file at the same time. Individual engineers receive automatic updates of new versions of source files; files that are being edited are locked, and an isolation mode allows an engineer to work with source files in an unchanging state. Each engineer incrementally compiles local changes made to source files in his own user work space to produce a local set of compilation and processing results. Incremental compilation uses unedited source files, the basis from the global work space, and the user's edited local files to produce the local processing results. Upon satisfactory results, edited source files and local processing results may replace and overwrite global files and results. Multiple engineers are allowed to work on complex logic design that can be

implemented on a single, large capacity device.

38 Claims, 21 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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☐ 6. Document ID: US 5812130 A

L20: Entry 6 of 12

File: USPT

Sep 22, 1998

US-PAT-NO: 5812130
DOCUMENT-IDENTIFIER: US 5812130 A

TITLE: Data management system and method for concurrent engineering

DATE-ISSUED: September 22, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Van Huben; Gary Alan	Poughkeepsie	NY		
Mueller; Joseph Lawrence	Poughkeepsie	NY		
Siegel; Michael Steven	Raleigh	NC		
Warnock; Thomas Bernard	Austin	TX		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
International Business Machines Corporation	Armonk	NY			02

APPL-NO: 08/ 761580 [PALM]
DATE FILED: December 6, 1996

INT-CL: [06] G06 F 3/00

US-CL-ISSUED: 345/339; 399/81
US-CL-CURRENT: 715/764; 399/81, 707/3

FIELD-OF-SEARCH: 345/329, 345/330, 345/331, 345/339, 345/348, 345/349, 345/356, 345/357, 345/968, 399/81

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5201047</u>	April 1993	Maki et al.	707/4
<u>5212771</u>	May 1993	Gane et al.	345/357
<u>5321605</u>	June 1994	Chapman et al.	705/7
<u>5333312</u>	July 1994	Wang	707/10
<u>5333315</u>	July 1994	Saether et al.	707/1
<u>5333316</u>	July 1994	Champagne et al.	707/8
<u>5418949</u>	May 1995	Suzuki	707/205
<u>5537526</u>	July 1996	Anderson et al.	707/515

5671428

September 1997

Muranaga et al.

345/329

OTHER PUBLICATIONS

Oliver Tegel, "Integrating Human Knowledge Into The Product Development Process" published in Proceedings of ASME Database Symposium Eng-Data Mgmt, Integrating the Engineering Enterprise ASME Database Symposium 1994, ASCE NY USA, pp. 93-100.
"Beyond EDA" published in Electronic Business, vol. 19, No. 6, Jun. 1993 pp. 42-46, 48.

ART-UNIT: 273

PRIMARY-EXAMINER: Katbab; A.

ATTY-AGENT-FIRM: Augspurger; Lynn L.

ABSTRACT:

A design control system suitable for use in connection with the design of integrated circuits and other elements of manufacture having many parts which need to be developed in a concurrent engineering environment with inputs provided by users and or systems which may be located anywhere in the world providing a set of control information for coordinating movement of the design information through development and to release while providing dynamic tracking of the status of elements of the bills of materials in an integrated and coordinated activity control system utilizing a repository which can be implemented in the form of a database (relational, object oriented, etc.) or using a flat file system. Once a model is created and/or identified by control information design libraries hold the actual pieces of the design under control of the system without limit to the number of libraries, and providing for tracking and hierarchical designs which are allowed to traverse through multiple libraries. Data Managers become part of the design team, and libraries are programmable to meet the needs of the design group they service.

22 Claims, 91 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	2003/09/02	2003/09/02	Claims	KMC	Draw Desc	Image
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☐ 7. Document ID: US 6614430 B1

L20: Entry 7 of 12

File: DWPI

Sep 2, 2003

DERWENT-ACC-NO: 2003-776225
DERWENT-WEEK: 200373
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TITLE: Mechanical specification data conversion method in CAD systems, involves translating extracted specification data in source CAD format to intermediate data structure which is translated to target CAD format

INVENTOR: RAPPOPORT, A

PRIORITY-DATA: 1998US-099340P (September 8, 1998), 1999US-0391311 (September 7, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6614430 B1	September 2, 2003		015	G06T015/00

INT-CL (IPC): G06 T 15/00

ABSTRACTED-PUB-NO: US 6614430B
BASIC-ABSTRACT:

NOVELTY - The specification data in source CAD format is extracted from a source CAD model, and translated into a format of non-geometric intermediate data structure. An intermediate CAD model is generated using intermediate data structure and the corresponding specification data is translated to target CAD format which is different from the source CAD format.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for apparatus for converting mechanical specification data in source CAD format to target CAD format.

USE - For transferring data between different CAD systems used in mechanical, industrial, manufacturing fields, for designing and manufacturing physical products.

ADVANTAGE - Enables efficient and lossless exchange of data classes between the CAD systems, without exposing the system data through a programming interface. Enables efficient data handling between the CAD system, reliably.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining non-geometric intermediate data structure generation process.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Draw Desc	Clip Img	Img
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☐ 8. Document ID: US 6035297 A

L20: Entry 8 of 12

File: DWPI

Mar 7, 2000

DERWENT-ACC-NO: 2000-269588
DERWENT-WEEK: 200023
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TITLE: Data management system e.g. for file and database management, has control repository communicates with users of design control system fulfilling requesting of user

INVENTOR: MUELLER, J L; VAN HUBEN, G A

PRIORITY-DATA: 1996US-0847393 (December 6, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6035297 A	March 7, 2000		092	G06F017/30

INT-CL (IPC): G06 F 17/30

ABSTRACTED-PUB-NO: US 6035297A
BASIC-ABSTRACT:

NOVELTY - The system has a control repository communicates with users of the design control system fulfilling requesting of a user and the data repositories of the data management control system through several managers. Each manager performs a unique function, the managers act as building blocks which can be combined in several manners to support an environment suitable multiple users of a user community.

DETAILED DESCRIPTION - The data management control system has a data management model structure capable of tracking several data objects governed under similar or disparate processes, all objects are classified as part of a library, having one or more types. Each type has one or more versions, and each version has one or more levels. The library is a grouping of objects which all have common characteristics causing them to belong to the same library grouping, and within a library, data are organized by version, versions allow parallel evolution of the same

component data element to coexist in the same library enabling multiple versions of a component data element to be developed in tandem while using the same object name and residing in the same library and at the same level simultaneously. For each version, there is a level structure denoting a degree of completeness, stability or quality control enabling the data manager to establish a level structure commensurate with the goals and objectives of the user community. Some data objects are at a level chained to another level to allow data to migrate from one Level to the next, and any or all of these Levels can be designated as Entry Levels allowing data to be entered into this Entry Level from a user's Private Library. There are also levels categorized as working levels and release levels data in working levels is transitory, and must eventually migrate to a release level, while release levels provide permanent storage vaults for a coherent set of data.

USE - For file and database management..

ADVANTAGE - Provides continuous tracking of created model while allowing user to modify it by adding components, deleting, components, changing status or deleting created model, and allowing promotion of model in data processing system through libraries of data processing system with various management tools.

DESCRIPTION OF DRAWING(S) - The figure shows the overall structure of the Design Control System's Data Management facilities.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMIC	Draw Desc	Clip Img	Ima
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☐ 9. Document ID: WO 9956206 A1, AU 9935626 A, EP 1071992 A1, US 6208345 B1, CN 1302401 A, KR 2001042737 A, MX 2000010063 A1, US 6453356 B1

L20: Entry 9 of 12

File: DWPI

Nov 4, 1999

DERWENT-ACC-NO: 2000-038671

DERWENT-WEEK: 200271

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TITLE: Visual communication interface developing method for integrated information system

INVENTOR: FISCHER, L; GURLA, H ; HU, Q ; MATTHEWS, R W ; MOW, B Y ; SHEARD, N C ; ZHENG, W J ; FISCHER, L J ; HIMABINDU, G

PRIORITY-DATA: 1998US-0093162 (June 8, 1998), 1998US-0060667 (April 15, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>WO 9956206 A1</u>	November 4, 1999	E	106	G06F009/44
<u>AU 9935626 A</u>	November 16, 1999		000	
<u>EP 1071992 A1</u>	January 31, 2001	E	000	G06F009/44
<u>US 6208345 B1</u>	March 27, 2001		000	G06F013/00
<u>CN 1302401 A</u>	July 4, 2001		000	G06F009/44
<u>KR 2001042737 A</u>	May 25, 2001		000	G06F009/44
<u>MX 2000010063 A1</u>	May 1, 2001		000	G06F017/60
<u>US 6453356 B1</u>	September 17, 2002		000	G06F015/16

INT-CL (IPC): G06 F 9/44; G06 F 13/00; G06 F 15/16; G06 F 17/60

ABSTRACTED-PUB-NO: US 6208345B

BASIC-ABSTRACT:

NOVELTY - Graphical connection established between a selected source and destination elements,

<http://westbrs:9000/bin/gate.exe?f=TOC&state=dmsa06.22&ref=20&dbname=PGPB,USPT,USOC,EPAB,J...> 6/16/05

are validated using associated input-output requirement models. Then, the graphical representation of information system is transformed into a runtime deployment. Selected information developed from the runtime deployment is presented to a user, using one of several user selectable visual views.

DETAILED DESCRIPTION - A graphical representation of source element and destination element of the information system is constructed. The graphical representation of source and destination elements comprises moving source and destination icons representative of source and destination element, from one region to another region of visual interface. The graphical connection between particular source and destination elements are mutually mapped, using input-output requirement models associated with each of the connected source and destination elements, when incompatibility between the particular source and destination elements exists. The selected information presented to the user comprises business information associated with data transmitted through graphical connection, performance information associated with transmission data through graphical connections, information associated with source and destination elements of information system and error information associated with data transmitted through graphical connections. INDEPENDENT CLAIMS are also included for the following:

- (a) system for visually developing communication;
- (b) computer program for visually implementing communication interface

USE - For visually implementing integrated information system.

ADVANTAGE - Enables reliable and scalable routing of information between dissimilar application and technologies. Provides a eutective visual interface that enables rapid design, deployment, runtime control, monitoring and analysis of business information. Eliminates or significantly minimizes need for customized interfaces required to facilitate the transport of dissimilar type of data between dissimilar applications. As tracing information is used in conjunction with the logging information, cause of error can be determined prior to error occurrence. Use of data meta models removes any cross- dependencies that exist between various systems and technologies implicated in the data integration object and permits to establish and modify interconnections between system components.

DESCRIPTION OF DRAWING(S) - The figure shows flow diagram of visual data integration method.
ABSTRACTED-PUB-NO:

WO 9956206A EQUIVALENT-ABSTRACTS:

NOVELTY - Graphical connection established between a selected source and destination elements, are validated using associated input-output requirement models. Then, the graphical representation of information system is transformed into a runtime deployment. Selected information developed from the runtime deployment is presented to a user, using one of several user selectable visual views.

DETAILED DESCRIPTION - A graphical representation of source element and destination element of the information system is constructed. The graphical representation of source and destination elements comprises moving source and destination icons representative of source and destination element, from one region to another region of visual interface. The graphical connection between particular source and destination elements are mutually mapped, using input-output requirement models associated with each of the connected source and destination elements, when incompatibility between the particular source and destination elements exists. The selected information presented to the user comprises business information associated with data transmitted through graphical connection, performance information associated with transmission data through graphical connections, information associated with source and destination elements of information system and error information associated with data transmitted through graphical connections. INDEPENDENT CLAIMS are also included for the following:

- (a) system for visually developing communication;
- (b) computer program for visually implementing communication interface

USE - For visually implementing integrated information system.

ADVANTAGE - Enables reliable and scalable routing of information between dissimilar application and technologies. Provides a eutective visual interface that enables rapid design, deployment, runtime control, monitoring and analysis of business information. Eliminates or significantly minimizes need for customized interfaces required to facilitate the transport of dissimilar type of data between dissimilar applications. As tracing information is used in conjunction with the logging information, cause of error can be determined prior to error occurrence. Use of data meta models removes any cross- dependencies that exist between various systems and technologies implicated in the data integration object and permits to establish and modify interconnections between system components.

DESCRIPTION OF DRAWING(S) - The figure shows flow diagram of visual data integration method.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RWC	Draw Desc	Clip Img	Ima
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☐ 10. Document ID: GB 2321324 A, GB 2321324 B, US 5812130 A, SG 60146 A1

L20: Entry 10 of 12

File: DWPI

Jul 22, 1998

DERWENT-ACC-NO: 1998-350592
DERWENT-WEEK: 200144
COPYRIGHT 2005 DERWENT INFORMATION LTD

TITLE: Data management system for concurrent engineering - which continuously tracks created models while allowing user to modify it, and allows promotion of model through libraries of data processing system

INVENTOR: MUELLER, J L; SIEGEL, M S ; VANHUBEN, G A ; WARNOCK, T B ; VAN HUBEN, G A

PRIORITY-DATA: 1996US-0761580 (December 6, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>GB 2321324 A</u>	July 22, 1998		103	G06F017/50
<u>GB 2321324 B</u>	August 1, 2001		000	G06F017/50
<u>US 5812130 A</u>	September 22, 1998		000	G06F003/00
<u>SG 60146 A1</u>	February 22, 1999		000	G06F017/50

INT-CL (IPC): G06 F 3/00; G06 F 17/30; G06 F 17/50

ABSTRACTED-PUB-NO: GB 2321324A
BASIC-ABSTRACT:

The design control system, includes a set of control information for coordinating movement of the design information through development and to release. The control system provides dynamic tracking of the status of elements of the bills of materials in an integrated and coordinated activity control system using a repository which can be implemented in the form of a database or using a flat file system.

Once a model is created or identified by control information, design libraries hold the actual pieces of the design under control of the system without limit to the number of libraries, and provide for tracking and hierarchical designs which are allowed to traverse through multiple libraries.

USE - For use in connection with design of integrated circuits and other elements of manufacture which need to be developed in concurrent engineering environment.
ABSTRACTED-PUB-NO:

GB 2321324B EQUIVALENT-ABSTRACTS:

The design control system, includes a set of control information for coordinating movement of the design information through development and to release. The control system provides dynamic tracking of the status of elements of the bills of materials in an integrated and coordinated activity control system using a repository which can be implemented in the form of a database or using a flat file system.

Once a model is created or identified by control information, design libraries hold the actual pieces of the design under control of the system without limit to the number of libraries, and provide for tracking and hierarchical designs which are allowed to traverse through multiple libraries.

USE - For use in connection with design of integrated circuits and other elements of manufacture which need to be developed in concurrent engineering environment.

US 5812130A

The design control system, includes a set of control information for coordinating movement of the design information through development and to release. The control system provides dynamic tracking of the status of elements of the bills of materials in an integrated and coordinated activity control system using a repository which can be implemented in the form of a database or using a flat file system.

Once a model is created or identified by control information, design libraries hold the actual pieces of the design under control of the system without limit to the number of libraries, and provide for tracking and hierarchical designs which are allowed to traverse through multiple libraries.

USE - For use in connection with design of integrated circuits and other elements of manufacture which need to be developed in concurrent engineering environment.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Image
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☐ 11. Document ID: GB 2318665 A, US 5983277 A, GB 2318665 B, US 6298319 B1

L20: Entry 11 of 12

File: DWPI

Apr 29, 1998

DERWENT-ACC-NO: 1998-209797
DERWENT-WEEK: 200239
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TITLE: Work-group electronic design collaboration system for PLD - includes global workspace containing project source files and basis specifying design and compilation with user workspaces allowing file modification and overwriting of global space files

INVENTOR: FAIRBANKS, B A; HEILE, F B

PRIORITY-DATA: 1996US-029277P (October 28, 1996), 1997US-0957957 (October 27, 1997), 1999US-0383479 (August 26, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>GB 2318665 A</u>	April 29, 1998		062	G06F017/50
<u>US 5983277 A</u>	November 9, 1999		000	G06F013/42
<u>GB 2318665 B</u>	June 28, 2000		000	G06F017/50
<u>US 6298319 B1</u>	October 2, 2001		000	G06F009/45

INT-CL (IPC): G06 F 9/45; G06 F 13/42; G06 F 17/50

ABSTRACTED-PUB-NO: GB 2318665A

BASIC-ABSTRACT:

The system includes a global workspace (102) with numerous project source files (110) specifying the design and a global basis (112) specifying compilation results from a compilation of the project source files. A first user workspace (104) includes a copy of a first project source file (114) specifying a portion of the design and being modifiable by the user to produce a modified file in the work space. The file is transferable back to the global work space overwriting the first project file. The first user work-space also includes a local basis specifying compilation results from a compilation of the project source files and the modified first file. The local basis is transferable to the global work space to overwrite the global basis.

A second user work-space includes a second file copy of a second one of the project source files. The second file specifies a second portion of the design and can be modified by a second user in the second work-space. The modified file is transferred back to the global space where it overwrites the second source file. The project source files may be simultaneously modified by the users.

ADVANTAGE - Allows multiple engineers to collaborate on design project using incremental compilation of changes avoiding re-test of complete design. Allows fast design of complex PLDs without having to break them up providing efficient circuit board usage.

ABSTRACTED-PUB-NO:

GB 2318665B EQUIVALENT-ABSTRACTS:

The system includes a global workspace (102) with numerous project source files (110) specifying the design and a global basis (112) specifying compilation results from a compilation of the project source files. A first user workspace (104) includes a copy of a first project source file (114) specifying a portion of the design and being modifiable by the user to produce a modified file in the work space. The file is transferable back to the global work space overwriting the first project file. The first user work-space also includes a local basis specifying compilation results from a compilation of the project source files and the modified first file. The local basis is transferable to the global work space to overwrite the global basis.

A second user work-space includes a second file copy of a second one of the project source files. The second file specifies a second portion of the design and can be modified by a second user in the second work-space. The modified file is transferred back to the global space where it overwrites the second source file. The project source files may be simultaneously modified by the users.

ADVANTAGE - Allows multiple engineers to collaborate on design project using incremental compilation of changes avoiding re-test of complete design. Allows fast design of complex PLDs without having to break them up providing efficient circuit board usage.

US 6298319B

The system includes a global workspace (102) with numerous project source files (110) specifying the design and a global basis (112) specifying compilation results from a compilation of the project source files. A first user workspace (104) includes a copy of a first project source file (114) specifying a portion of the design and being modifiable by the user to produce a modified file in the work space. The file is transferable back to the global work space overwriting the first project file. The first user work-space also includes a local basis specifying compilation results from a compilation of the project source files and the modified first file. The local basis is transferable to the global work space to overwrite the global basis.

A second user work-space includes a second file copy of a second one of the project source files. The second file specifies a second portion of the design and can be modified by a second user in the second work-space. The modified file is transferred back to the global space where

it overwrites the second source file. The project source files may be simultaneously modified by the users.

ADVANTAGE - Allows multiple engineers to collaborate on design project using incremental compilation of changes avoiding re-test of complete design. Allows fast design of complex PLDs without having to break them up providing efficient circuit board usage.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Clip Img	Ima
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☐ 12. Document ID: NL 6615208 A, AU 6614430 A, BE 690212 A, DE 1467618 B, GB 1094949 A, JP 71005824 B, US 3382176 A

L20: Entry 12 of 12

File: DWPI

DERWENT-ACC-NO: 1968-85140P
DERWENT-WEEK: 196800
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TITLE: Low foam washing agent of an aqueous alcohol solution

PRIORITY-DATA: 1965DE-H057780 (November 26, 1965)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
NL 6615208 A			000	
AU 6614430 A			000	
BE 690212 A			000	
DE 1467618 B	August 8, 1974		000	
GB 1094949 A			000	
JP 71005824 B			000	
US 3382176 A			000	

INT-CL (IPC): C11D 1/66

ABSTRACTED-PUB-NO: NL 6615208A
BASIC-ABSTRACT:

Low foam washing agent according to NE. 64,14130 is characterised by component A consisting at least partly of an epoxyethane adduct or a propylene-oxy polymer, which contains 35-85 mol % ethylene-oxy groups, and has a mol. wt. of 1000-4000; and/or component C consisting at least in part of a propylene-oxy polymer with a mol. wt. of 1000-5000, which may contain up to 30 mol % epoxyethane groups.

The washing agent is specially formulated for use in dishwashing machines. The agent has little or no tendency to separate into its components, and has a low foam action combined with effective washing action.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Image
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Term	Documents
"6614430"	3

6614430S	0
((("6614430".PN.) OR 19).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	12
(L19 OR 6614430.PN.).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	12

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Search Results - Record(s) 1 through 14 of 14 returned.

☐ 1. Document ID: US 5909588 A

L13: Entry 1 of 14

File: USPT

Jun 1, 1999

US-PAT-NO: 5909588
DOCUMENT-IDENTIFIER: US 5909588 A

TITLE: Processor architecture with divisional signal in instruction decode for parallel storing of variable bit-width results in separate memory locations

DATE-ISSUED: June 1, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fujimura; Hiroki	Kanagawa-ken			JP
Takai; Hiroyuki	Kanagawa-ken			JP
Yaguchi; Toshiyuki	Kanagawa-ken			JP
Koino; Seiji	Tokyo			JP
Takasugi; Mikio	Kanagawa-ken			JP
Kunimatsu; Atsushi	Tokyo			JP

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Kabushiki Kaisha Toshiba	Kawasaki			JP	03

APPL-NO: 08/ 671619 [PALM]
DATE FILED: June 28, 1996

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	7-163676	June 29, 1995

INT-CL: [06] G06 F 12/04, G06 F 9/345

US-CL-ISSUED: 395/800.23; 395/380, 395/386, 711/209, 711/214
US-CL-CURRENT: 712/23; 711/209, 711/214, 712/204, 712/210

FIELD-OF-SEARCH: 711/214, 711/209, 395/380, 395/800.23, 395/386

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4020470	April 1977	Drimak et al.	711/202
4538223	August 1985	Vahlstrom et al.	711/214

<u>5155820</u>	October 1992	Gibson	395/386
<u>5606520</u>	February 1997	Gove et al.	711/217
<u>5636351</u>	June 1997	Lee	395/380
<u>5666510</u>	September 1997	Mitsuishi et al.	711/220
<u>5680598</u>	October 1997	Farrell et al.	395/568
<u>5717946</u>	February 1998	Satou et al.	395/800.23

OTHER PUBLICATIONS

Lee, Ruby B. "Precision Architecture." IEEE Computer, vol. 22, No. 1, Jan. 1989, pp. 78-89.

ART-UNIT: 273

PRIMARY-EXAMINER: Pan; Daniel H.

ASSISTANT-EXAMINER: Rossi; Jeffrey Allen

ATTY-AGENT-FIRM: Foley & Lardner

ABSTRACT:

An instruction code is received by an instruction input section 103 and then decoded by the instruction decode section 105 to generate an operand and control signals. The instruction division control section 109 generates a division control signal based on the control signals and an operand selection section 107 generates an operand having a desired bit width by using the operand from the instruction decode section 105 based on the division control signal. An arithmetic section 111 divides the operand into a desired bit width parts based on the division control signal and performs arithmetic operation. A memory access control section 115 receives calculated address and transfers this calculated address and the division control signal to a memory. The memory access control section 115 receives data from the memory and transfers the data into the arithmetic result store section 113.

16 Claims, 14 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Image
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☐ 2. Document ID: US 5838906 A

L13: Entry 2 of 14

File: USPT

Nov 17, 1998

US-PAT-NO: 5838906

DOCUMENT-IDENTIFIER: US 5838906 A

TITLE: Distributed hypermedia method for automatically invoking external application providing interaction and display of embedded objects within a hypermedia document

DATE-ISSUED: November 17, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Doyle; Michael D.	Alameda	CA		
Martin; David C.	San Jose	CA		
Ang; Cheong S.	Pacifica	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
The Regents of the University of California	Oakland	CA			02

APPL-NO: 08/ 324443 [PALM]
DATE FILED: October 17, 1994

INT-CL: [06] C06 F 9/44, C06 F 15/16, C06 F 17/30

US-CL-ISSUED: 395/200.32; 395/200.28, 395/680, 395/685, 345/326, 345/346, 707/501, 707/513, 707/515, 707/516

US-CL-CURRENT: 709/202; 709/218, 715/513, 715/515, 715/516, 715/738, 715/804, 719/315

FIELD-OF-SEARCH: 395/157, 395/200.03, 395/161, 395/118, 395/144, 395/145, 395/146, 395/147, 395/148, 395/683, 395/777, 395/778, 395/762, 395/326, 395/333, 395/334, 395/335, 395/676, 707/501, 707/513, 707/515, 707/516, 345/326, 345/343, 345/346

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4815029</u>	March 1989	Barker et al.	707/516
<u>4847604</u>	July 1989	Doyle	340/706
<u>4949248</u>	August 1990	Caro	395/200.03
<u>5146553</u>	September 1992	Noguchi et al.	707/516
<u>5202828</u>	April 1993	Vertelney et al.	364/419
<u>5204947</u>	April 1993	Bernstein et al.	395/157
<u>5206951</u>	April 1993	Khoyi et al.	395/683
<u>5274821</u>	December 1993	Rouquie	395/705
<u>5307499</u>	April 1994	Yin	395/700
<u>5321806</u>	June 1994	Meinerth et al.	395/162
<u>5321808</u>	June 1994	Rupp et al.	395/164
<u>5347632</u>	September 1994	Filepp et al.	395/200.09
<u>5367635</u>	November 1994	Bauer et al.	395/200.32
<u>5390314</u>	February 1995	Swanson	395/500
<u>5418908</u>	May 1995	Keller et al.	395/200.32
<u>5544320</u>	August 1996	Konrad	395/200.09
<u>5581686</u>	December 1996	Koppolu et al.	395/340
<u>5606493</u>	February 1997	Duscher et al.	395/200.32
<u>5652876</u>	July 1997	Ashe et al.	707/516

OTHER PUBLICATIONS

Stephen Le Hunte, "<EEMBED>--Embedded Objects", HTML Reference Library--HTMLIB v2.1, 1995: n.pag. Online. Internet.

"A Little History of the world Wide Web", n.pag. Online. Internet: available
<http://www.w3.org/History.html>.

"NCSA Mosaic Version Information", n.pag. Online. Internet: available
<http://www.ncsa.uiuc.edu/SDG/Software>.

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Vetter, Ronald "Mosaic and the World-Wide Web," Computer Magazine, v.27, Iss.10, pp. 49-57, Oct. 1994.

Wynne et al. "Lean Management, Group Support Systems, and Hypermedia: a Combination Whose Time Has Come," System Sciences, 1993 Annual Hawaii Int'l Conf., pp. 112-121.

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Moran, Patrick "Tele-Nicer-slicer-Dicer: A New Tool for the Visualization of Large Volumetric Data", NCSA Technical Report (TRO14), Aug. 1993.

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Crowley, T., et al., "MMConf: An Infrastructure for Building Shared Multimedia Applications", CSCW 90 Proceedings, Oct. 1990, p. 329-342.

Davis, H., et al., "Towards An Integrated Information Environment With Open Hypermedia System", ACM ECHT Conference, Dec. 1992, pp. 181-190.

Ferrara, F., "The KIM Query System", Abstract, SIGCHI Bulletin, vol. 6, No. 3, Jul. 1994, pp. 30-39.

Gibbs, S., "Composite Multimedia and Active Objects", OOPSLA '91, pp. 97-112.

Davis, H., et al., "Microcosm: An Open Hypermedia System", Interchi '93, Apr. 1993, p. 526.

Vaziri, A., "Scientific Visualization in High-Speed Network Environments", Computer Networks and ISDN Systems 22, 1991, pp. 111-129.

Cullen, J., et al., "The Use of FTAM to access graphical pictures across wide area networks", Computer Networks and ISDN Systems, 1992, pp. 337-383.

Lashkari, Y.Z., et al., "PLX: A Proposal to Implement a General Broadcasting Facility in a Distributed Environment Running X Windows", Comput. & Graphics, vol. 16, No. 2, pp. 143-149, 1992.

Kirste, T., "Spacepicture--An Interactive Hypermedia Satellite Image Archival System", Comput. & Graphics, vol. 17, No. 3, pp. 251-260, 1993.

Coulson, G., et al., "Extensions to ANSA for Multimedia Computing", Computers Networks and ISDN Systems 25, 1992, pp. 305-323.

Huynh, Duong Le, et al., "PIX: An Object-Oriented Network Graphics Environment", Comput. & Graphics, vol. 17, No. 3, pp. 295-304, 1993.

Berners-Lee, T.J., et al., The World-Wide Web, Computer Networks and ISDN Systems 25, 1992, pp. 454-459.

Shackelford, D.E., et al., "The Architecture and Implementation of a Distributed Hypermedia Storage System", Hypertext '93 Proceedings, Nov. 1993, pp. 1-13.

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Udell, J., "Visual Basic Custom Controls Meet OLE", Byte Magazine, Mar. 1994, pp. 197-200.

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Fogarty, K., et al., "Microsoft's OLE can be network Trojan Horse", Network World Magazine, Jun. 27, 1994, vol. 11, No. 26, pp. 1 and 75.

"Cello WWW Browser Release 1.01a", Article obtained from the Internet, <ftp.law.cornell.edu/pub/L11/Cello> no DDE, Mar. 16, 1994, pp. 2-9.

"OLE 2.0: Death to Monoliths", Byte Magazine, Mar. 1994, p. 122.

ART-UNIT: 276

PRIMARY-EXAMINER: Dung; Dinh C.

ATTY-AGENT-FIRM: Townsend and Townsend and Crew LLP

ABSTRACT:

A system allowing a user of a browser program on a computer connected to an open distributed hypermedia system to access and execute an embedded program object. The program object is embedded into a hypermedia document much like data objects. The user may select the program object from the screen. Once selected the program object executes on the user's (client) computer or may execute on a remote server or additional remote computers in a distributed processing arrangement. After launching the program object, the user is able to interact with the object as the invention provides for ongoing interprocess communication between the

application object (program) and the browser program. One application of the embedded program object allows a user to view large and complex multi-dimensional objects from within the browser's window. The user can manipulate a control panel to change the viewpoint used to view the image. The invention allows a program to execute on a remote server or other computers to calculate the viewing transformations and send frame data to the client computer thus providing the user of the client computer with interactive features and allowing the user to have access to greater computing power than may be available at the user's client computer.

10 Claims, 12 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	EXAM	Draw Desc	Image
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☐ 3. Document ID: US 5796986 A

L13: Entry 3 of 14

File: USPT

Aug 18, 1998

US-PAT-NO: 5796986

DOCUMENT-IDENTIFIER: US 5796986 A

TITLE: Method and apparatus for linking computer aided design databases with numerical control machine database

DATE-ISSUED: August 18, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fuller; Mark	San Jose	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
3Com Corporation	Santa Clara	CA			02

APPL-NO: 08/ 703110 [PALM]

DATE FILED: August 22, 1996

PARENT-CASE:

This is a Continuation of application Ser. No. 08/444,944, filed May 19, 1995, now abandoned.

INT-CL: [06] G06 F 15/46

US-CL-ISSUED: 395/500; 395/80, 395/670, 395/671, 395/680, 395/682, 364/488, 364/489, 364/468.01, 364/468.02

US-CL-CURRENT: 716/1; 700/245, 700/95, 700/96, 718/100, 718/101, 719/319

FIELD-OF-SEARCH: 364/489, 364/498, 364/491, 364/468.01, 364/468.02, 364/130, 364/136, 364/478.01, 395/80, 395/85, 395/11, 395/76, 395/77, 395/670, 395/88, 395/671, 395/680, 395/682, 29/703, 29/740, 29/741, 29/739

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>3653072</u>	March 1972	Ballas et al.	444/1
<u>4342090</u>	July 1982	Caccoma et al.	364/491

<u>4681452</u>	July 1987	Watanabe	356/375
<u>4720798</u>	January 1988	Reed et al.	364/489
<u>4723221</u>	February 1988	Matsuura et al.	364/559
<u>4737845</u>	April 1988	Susuki et al.	358/101
<u>4767489</u>	August 1988	Lindner	156/345
<u>4780617</u>	October 1988	Umatate et al.	250/548
<u>4922434</u>	May 1990	Fule	364/513
<u>5272641</u>	December 1993	Ford et al.	364/468
<u>5425036</u>	June 1995	Liu et al.	371/23
<u>5452226</u>	September 1995	Hooper et al.	364/489

ART-UNIT: 273

PRIMARY-EXAMINER: Teska; Kevin J.

ASSISTANT-EXAMINER: Phan; Thai

ATTY-AGENT-FIRM: Townsend and Townsend and Crew LLP

ABSTRACT:

An integrated manufacture and design system and a database translator that allows use of a subset of data directly from a CAD database to provide the necessary control data for use in a CAM assembly system. A database translator according to the present invention can examine the CAD data specifying a product, determine which of the component parts of that product are unknown to the CAM assembly system, and can insert into the CAM assembly system's database whatever new information the CAM system requires to manufacture the product. The invention may be embodied as a number of software modules on a fixed medium such as a computer readable disk or computer memory.

16 Claims, 3 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	Draw Desc	Image
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☐ 4. Document ID: US 5666543 A

L13: Entry 4 of 14

File: USPT

Sep 9, 1997

US-PAT-NO: 5666543

DOCUMENT-IDENTIFIER: US 5666543 A

TITLE: Method of trapping graphical objects in a desktop publishing program

DATE-ISSUED: September 9, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gartland; Richard A.	Bothell	WA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Adobe Systems Incorporated	Mountain View	CA			02

APPL-NO: 08/ 216729 [PALM]

DATE FILED: March 23, 1994

INT-CL: [06] G06 T 1/00

US-CL-ISSUED: 395/788; 395/116, 345/431

US-CL-CURRENT: 715/526; 348/666, 358/1.17, 715/513

FIELD-OF-SEARCH: 395/145-148, 395/131, 395/133-135, 395/116-117, 395/109, 395/779, 395/780, 395/782, 395/783, 395/784, 395/785, 395/787, 395/788-790, 345/115, 345/136, 345/149-150, 345/185-191

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4115816</u>	September 1978	Moe et al.	358/459
<u>4583116</u>	April 1986	Hennig et al.	358/515
<u>4603431</u>	July 1986	Grover et al.	382/56
<u>4683492</u>	July 1987	Sugiura et al.	358/518
<u>4815009</u>	March 1989	Blatin	395/129
<u>4817187</u>	March 1989	Lien	382/56
<u>4821336</u>	April 1989	Roye	382/56
<u>4824761</u>	April 1989	Sturgis et al.	430/209
<u>4852485</u>	August 1989	Brunner	101/211
<u>4916484</u>	April 1990	Ohlig	355/91
<u>4931861</u>	June 1990	Taniguchi	358/528
<u>5029115</u>	July 1991	Geraci	395/131
<u>5043711</u>	August 1991	Harrington	345/133
<u>5113249</u>	May 1992	Yosefi	358/515
<u>5115402</u>	May 1992	Matsushiro et al.	395/141
<u>5131058</u>	July 1992	Ting et al.	382/47
<u>5157783</u>	October 1992	Anderson et al.	395/600
<u>5208905</u>	May 1993	Takakura et al.	395/148
<u>5251298</u>	October 1993	Nally	395/166
<u>5274758</u>	December 1993	Beitel et al.	395/154
<u>5295236</u>	March 1994	Bjorge	395/134
<u>5313570</u>	May 1994	Dermer et al.	395/131
<u>5353388</u>	October 1994	Motoyama	395/117
<u>5438653</u>	August 1995	Boenke et al.	395/131
<u>5542052</u>	July 1996	Deutsch et al.	395/131

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0 189 238 A1	July 1986	EP	

OTHER PUBLICATIONS

Elizer et al, "Trapping Test: comparing Aldus, Island Graphics, Rampage and Scitex . . . ", The Seybold Report on Desktop Publishing, v8 n6, pp. 3-34 Feb. 1994.

Tinkel et al, "Professional page layout: time to switch? (Evaluation of Aldus' PageMaker 5.0 . . .", MacUser, v10 n2, pp. 108-117 Feb. 1994.

Staten, "Scitex sues Aldus in dispute over trapping technology patent", MacWeek, v8 N10, p. 32 Mar. 1994.

Staten, "IslandTrapper snatches batches, version 1.1 supports duotones, DCS files", MacWeek, v8 n5, p. 22 Jan. 1994.

ART-UNIT: 242

PRIMARY-EXAMINER: Feild; Joseph H.

ATTY-AGENT-FIRM: Fish & Richardson P.C.

ABSTRACT:

The publication prolog of a PostScript page description language (PDL) or other PDL file is modified to create traps within an interpreter or raster image processor (RIP). The publication prolog is modified to provide the trapping instructions to the RIP, while the script is sent unmodified to the RIP. In a preferred embodiment, modification of the publication prolog to instruct the RIP includes creating a directory of the color objects in the publication, and trapping the color objects in the publication using the directory. Thereafter, the modified publication prolog and script are sent to the RIP and trap areas are created as the publication is rendered.

7 Claims, 20 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Image
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☐ 5. Document ID: US 5652876 A

L13: Entry 5 of 14

File: USPT

Jul 29, 1997

US-PAT-NO: 5652876

DOCUMENT-IDENTIFIER: US 5652876 A

TITLE: Method and apparatus for launching files created by non-resident application programs

DATE-ISSUED: July 29, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ashe; Dylan B.	Sunnyvale	CA		
Kledzik; Nick G.	Cupertino	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Apple Computer, Inc.	Cupertino	CA			02

APPL-NO: 08/ 718119 [PALM]

DATE FILED: September 18, 1996

PARENT-CASE:

RELATED APPLICATIONS This is a continuation of application Ser. No. 08/344,542, filed on Nov. 22, 1994, now abandoned, which is a continuation of application Ser. No. 07/997,688, filed on Dec. 28, 1992, and now abandoned.

INT-CL: [06] G06 F 9/44

US-CL-ISSUED: 395/500; 395/601, 364/283.2
US-CL-CURRENT: 703/26; 707/1, 715/516, 715/523

FIELD-OF-SEARCH: 395/500, 395/600

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4686522</u>	August 1987	Hernandez et al.	340/709
<u>5065347</u>	November 1991	Pajak et al.	395/159

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0192927	September 1986	EP	
0408132	January 1991	EP	

OTHER PUBLICATIONS

Alan Simpson, "Mastering Word Perfect For Windows," selected pages, Library of Congress Card No. 91-66933, 1993.
IBM Technical Disclosure Bulletin, "Automatic Selection of a Transformation Graph Based on User Criteria", vol. 34, No. 6, Nov. 1991, Armonk, NY, pp. 157-158.
N. Ajitomi, "Design of Generalized Document Viewer Using Object Chain Representation," IEEE, Compsac 19 Conference, Sep. 11-13, 1991 Tokyo, Japan, pp. 204-211.

ART-UNIT: 235

PRIMARY-EXAMINER: Lim; Krisna

ATTY-AGENT-FIRM: Carr DeFilippo & Ferrell

ABSTRACT:

A method in a computer system enables the translation and opening of a document which was created by an application program no longer resident in the computer system. The method begins by identifying the file format of the target document, Subsequently, all computer resident applications capable of opening the document are identified and translation paths from the document to the accessible application programs are calculated. Each of the available application programs and corresponding translation paths are listed in order of fidelity, with an indicia identifying the preferred path. One of the translation paths is selected and the document is translated into the acceptable format. Following translation of the program, the application is launched and the newly translated document is opened.

21 Claims, 22 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KOMC	Draw Desc	Image
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US-PAT-NO: 5634064

DOCUMENT-IDENTIFIER: US 5634064 A

TITLE: Method and apparatus for viewing electronic documents

DATE-ISSUED: May 27, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Warnock; John E.	Los Altos	CA		
McCoy; William H.	San Francisco	CA		
Cohn; Richard J.	Palo Alto	CA		
Padgett; Allan P.	Menlo Park	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Adobe Systems Incorporated	San Jose	CA			02

APPL-NO: 08/ 693489 [PALM]

DATE FILED: August 2, 1996

PARENT-CASE:

This is a continuation of application Ser. No. 08/304,680, filed Sep. 12, 1994, now abandoned.

INT-CL: [06] G06 T 1/00

US-CL-ISSUED: 395/774; 395/779, 395/788, 395/341, 395/342

US-CL-CURRENT: 715/513; 715/517, 715/526, 715/784, 715/788

FIELD-OF-SEARCH: 395/145-148, 395/155-161, 364/419.1, 364/419.17, 434/118

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5001697</u>	March 1991	Torres	395/157
<u>5146552</u>	September 1992	Cassorla et al.	395/145
<u>5341466</u>	August 1994	Perlin et al.	395/139

OTHER PUBLICATIONS

Classified Search and Image Retrieval Student Manual; PRC; May 1991; ch 1: pp. 2-3; ch 2: pp.6, 14; ch 3: pp. 2-3; ch 4: p. 13.

"FrameMaker 4, Windows and Macintosh Version," Frame Technology International Limited, Sep. 1993, pp. 27-2-27.29.

"FrameMaker Reference," Frame Technology Corporation, May 1991, pp. 1-19-1-25.

ART-UNIT: 242

PRIMARY-EXAMINER: Feild; Joseph H.

ATTY-AGENT-FIRM: Fish & Richardson P.C.

ABSTRACT:

A reader for displaying an electronic document stored in a predetermined format and allowing articles of the document to be read in the direction of their content information flow. The reader includes a selector to select an article of the document to be read. A displayer displays a first portion of the article in a manner which promotes comfortable viewing, and a navigator permits the display of the next and remaining sequential portions of the article in content flow (or reverse content flow) order. Preferably, the displayer pans and zooms, as necessary, to position the article portion in an article viewing window. A method for viewing electronic documents on a digital computer includes the steps of storing in the memory of the digital computer an electronic document, selecting an article to be displayed on an output device of the digital computer in an article view, displaying at least a portion of the article in the article viewing mode on the output device, and using an input device of the digital computer to cause a display of additional portions of the article to be displayed on the output device in the article viewing mode. These additional portions of the article are determined, at least in part, by predefined article sections and section links of the document so that the thread of the article can be followed in forward and reverse directions.

37 Claims, 19 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw Desc	Image
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☐ 7. Document ID: US 5551028 A

L13: Entry 7 of 14

File: USPT

Aug 27, 1996

US-PAT-NO: 5551028

DOCUMENT-IDENTIFIER: US 5551028 A

TITLE: Design data management system and associated method

DATE-ISSUED: August 27, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Voll; Robert	West Linn	OR		
Berg; William C.	Beaverton	OR		
Sergent; Brad	Lake Oswego	OR		
Stevens; Sam	Portland	OR		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Mentor Graphics Corporation	Wilsonville	OR			02

APPL-NO: 08/ 396336 [PALM]

DATE FILED: February 28, 1995

PARENT-CASE:

This application is a continuation of application Ser. No. 08/266,327, filed on Jun. 27, 1994, now abandoned, which is a continuation of application Ser. No. 07/663,142, filed on Feb. 28, 1991, now abandoned.

INT-CL: [06] G06 F 17/30

US-CL-ISSUED: 395/600; 364/474.24, 364/917.96, 364/974, 364/282.1

US-CL-CURRENT: 707/103R; 700/182, 707/104.1

FIELD-OF-SEARCH: 395/600, 364/474.24, 364/490, 364/491

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4357635</u>	November 1982	Hasegawa	360/51
<u>4558413</u>	December 1985	Schmidt et al.	364/300
<u>4939507</u>	July 1990	Beard et al.	340/706
<u>5050105</u>	July 1991	Peters	364/521
<u>5162992</u>	November 1992	Williams	364/419
<u>5212792</u>	May 1993	Gerety et al.	395/650

OTHER PUBLICATIONS

Stan Krute, "A Few Things That Work, Something That Doesn't and a little HyperTalking", Dr. Doobs Journal Of Software Tools for the Professional Programmer, vol.: v13 Issue: n4, Apr., 1988, p. 106-112.

Gina Smith, "Windows 3.0 Beta Version Cracks 640K-byte Barrier", PC Week, vol.: v6, Issue: n22, Jun. 5, 1989, pp. 1-2.

Salvatore Parascandolo, "Cricket Color Paint", MacUser, vol.: v5, Issue: n10, Oct., 1989, pp. 94-95.

"Desktop Publishing: New Express Publisher 2.0 Delivers Capabilities No Other Desktop Publisher Can at \$160", EDGE: Work-Group Computing Report, vol.: v1 Issue: n20, Oct. 8, 1990.

Hardwick et al., "Using A Relational Database As An Index to a Distributed Object Database in Engineering Design Systems", Second International Conference on Data and Knowledge Systems for Manufacturing and Engineering, 16-18 Oct. 1989, pp. 4-11.

Kim, Won and Banerjee, Jay, "Operations and Implimentation of Complex Objects", IEEE and Transactions on Software Engeering, vol. 14, No. 7, Jul. 1988.

Xerox, UP Reference Library Version 1.0, Xerox Corporation (Elsegundocacif, Sep. 1985).

ART-UNIT: 237

PRIMARY-EXAMINER: Black; Thomas G.

ASSISTANT-EXAMINER: Lintz; Paul R.

ATTY-AGENT-FIRM: Klarquist, Sparkman, Campbell, Leigh & Whinston

ABSTRACT:

A system and method for organizing design data in a computer system so that multiple data files can be represented and manipulated as a single entity, referred to herein as a design object. Each design object is represented graphically by a symbol on a computer display screen. Associated with the multiple data files of a design object is a software design tool such as a text editor or schematic editor. The tool may be applied to work on the data files of the design object when the design object is opened. Opening a design object is typically done by positioning the screen cursor over the symbol and then using a mouse or keyboard to open the symbol and thereby the data files and tool. Data files grouped in a design object are thus much simpler to manage than separate data files that a user must first identify, retrieve and collect before applying a tool.

18 Claims, 12 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FIGS	Draw Desc	Image
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☐ 8. Document ID: US 5838906 A

DERWENT-ACC-NO: 1999-023910
DERWENT-WEEK: 200377
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TITLE: Interactive hypermedia access method for Internet - involves executing external application associated with hypermedia document on client workstation

INVENTOR: ANG, C S; DOYLE, M D ; MARTIN, D C

PRIORITY-DATA: 1994US-0324443 (October 17, 1994)

PATENT-FAMILY:				
PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5838906 A	November 17, 1998		020	G06F009/44

INT-CL (IPC): G06 F 9/44; G06 F 15/16; G06 F 17/30

ABSTRACTED-PUB-NO: US 5838906A
BASIC-ABSTRACT:

NOVELTY - The method involves providing a client-server network, of which a client executes a browser program which passes a distributed hypermedia document and initiates processing specified by predetermined text formats. The initial portion of the document received over the network is displayed in a browser initiated window. An embedded text format in the hypermedia document specifies the location of an executable application of the document, which enables interactive processing of the object displayed by the document.

DETAILED DESCRIPTION - Depending on the type of the object, the browser program identifies, locates and passes the embedded text format to automatically initiate the execution of the external application in the client workstation. The interactive control of the external application is achieved by interprocess communication between the browser, application on client and application on network server.

USE - Data manipulation in a computer network for retrieving, presenting and manipulating embedded program objects in distributed hypermedia systems.

ADVANTAGE - The system allows a user at a small client computer connected to the Internet to locate, retrieve and manipulate data objects when the data objects are bandwidth-intensive and compute-intensive. Also allows a user to manipulate data objects in an interactive way to provide the user with a better understanding of information presented and to allow the user to accomplish a wider variety of tasks.

DESCRIPTION OF DRAWING(S) - The drawing shows a typical screen layout.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMMC	Draw Desc	Clip Img	Ima
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☐ 9. Document ID: JP 3479385 B2, JP 09016398 A, US 5909588 A

DERWENT-ACC-NO: 1997-137042
DERWENT-WEEK: 200405
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TITLE: Information processor with simultaneous read-out/write-in functions - in which memory access control part accesses and outputs data from memory according to address calculated by

arithmetic part

INVENTOR: FUJIMURA, H; KOINO, S ; KUNIMATSU, A ; TAKAI, H ; TAKASUGI, M ; YAGUCHI, T

PRIORITY-DATA: 1995JP-0163676 (June 29, 1995)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>JP 3479385 B2</u>	December 15, 2003		015	G06F009/38
<u>JP 09016398 A</u>	January 17, 1997		014	G06F009/38
<u>US 5909588 A</u>	June 1, 1999		000	G06F012/04

INT-CL (IPC): G06 F 9/34; G06 F 9/345; G06 F 9/38; G06 F 12/04

ABSTRACTED-PUB-NO: JP 09016398A

BASIC-ABSTRACT:

The processor (101) has a command input part (103) through which an instruction code is fed. A command decoding part (105) decodes the input instruction code and a outputs an operand and a control signal. A command partition control part (109) outputs a partition control signal along with the control signal output from the command decoding part. An operand selection part (107) selects the operand output from the command decoding part according to output from an arithmetic result holder (113).

An arithmetic operation part (111) divides the selected operand in predetermined bit width using the partition control signal and performs address calculation. A memory access control part (115) searches and outputs the data from a memory according to address calculated by the arithmetic part. The arithmetic result holder holds the arithmetic result of the arithmetic part and the data output from the memory access control part.

ADVANTAGE - Enables performance of read-out/write of multiple data. Enables loading and execution of multiple operands.

ABSTRACTED-PUB-NO:

US 5909588A EQUIVALENT-ABSTRACTS:

The processor (101) has a command input part (103) through which an instruction code is fed. A command decoding part (105) decodes the input instruction code and a outputs an operand and a control signal. A command partition control part (109) outputs a partition control signal along with the control signal output from the command decoding part. An operand selection part (107) selects the operand output from the command decoding part according to output from an arithmetic result holder (113).

An arithmetic operation part (111) divides the selected operand in predetermined bit width using the partition control signal and performs address calculation. A memory access control part (115) searches and outputs the data from a memory according to address calculated by the arithmetic part. The arithmetic result holder holds the arithmetic result of the arithmetic part and the data output from the memory access control part.

ADVANTAGE - Enables performance of read-out/write of multiple data. Enables loading and execution of multiple operands.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	IMC	Draw Desc	Clip Img	Ima
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☐ 10. Document ID: WO 9636921 A1, US 5796986 A

L13: Entry 10 of 14

File: DWPI

Nov 21, 1996

DERWENT-ACC-NO: 1997-012251

DERWENT-WEEK: 199840
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TITLE: Integrated design and manufacturing system for product - uses subset of data directly from CAD database to provide necessary control data for use in CAM assembly system

INVENTOR: FULLER, M

PRIORITY-DATA: 1995US-0444944 (May 19, 1995), 1996US-0703110 (August 22, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9636921 A1	November 21, 1996	E	029	G06F015/16
US 5796986 A	August 18, 1998		000	G06F015/46

INT-CL (IPC): G06 F 15/16; G06 F 15/46

ABSTRACTED-PUB-NO: US 5796986A
BASIC-ABSTRACT:

The system includes a Computer Aided Design (CAD) system capable of accepting design instructions and of constructing a detailed description of the product. The description specifies the interrelationship of several parts used in constructing the product. A design data base contains detailed design data regarding the product and the parts used to construct the product. The database also contains data specific to the manufacture of the product but not used in product design.

The system further includes a robot for assembling the parts into the product. A robot database contains data necessary for manufacturing the product. A robot programmer interprets the robot data base and directs specific movement of the robot to assemble the product. Finally a translator extracts data necessary for the robot programmer from the CAD data base and places the data in the robot database.

ADVANTAGE - Allows CAD data to be directly and automatically used to provide control data necessary for product assembly by CAM equipment. Process is then quicker, cheaper and less prone to errors.

ABSTRACTED-PUB-NO:

WO 9636921A EQUIVALENT-ABSTRACTS:

The system includes a Computer Aided Design (CAD) system capable of accepting design instructions and of constructing a detailed description of the product. The description specifies the interrelationship of several parts used in constructing the product. A design data base contains detailed design data regarding the product and the parts used to construct the product. The database also contains data specific to the manufacture of the product but not used in product design.

The system further includes a robot for assembling the parts into the product. A robot database contains data necessary for manufacturing the product. A robot programmer interprets the robot data base and directs specific movement of the robot to assemble the product. Finally a translator extracts data necessary for the robot programmer from the CAD data base and places the data in the robot database.

ADVANTAGE - Allows CAD data to be directly and automatically used to provide control data necessary for product assembly by CAM equipment. Process is then quicker, cheaper and less prone to errors.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Index	Draw Desc	Clip Img	Ima
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☐ 11. Document ID: US 5551028 A

L13: Entry 11 of 14

File: DWPI

Aug 27, 1996

DERWENT-ACC-NO: 1996-401985
DERWENT-WEEK: 199640
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TITLE: Graphically orientated data management method - involves providing design objects including file set definitions, and creating instances of that object which are associated with software tools

INVENTOR: BERG, W C; SERGENT, B ; STEVENS, S ; VOLL, R

PRIORITY-DATA: 1991US-0663142 (February 28, 1991), 1994US-0266327 (June 27, 1994), 1995US-0396336 (February 28, 1995)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5551028 A	August 27, 1996		022	G06F017/30

INT-CL (IPC): G06 F 17/30

ABSTRACTED-PUB-NO: US 5551028A
BASIC-ABSTRACT:

The method involves providing, in memory, a design object type that includes a file set definition of multiple data files representing related but distinct aspects of the object design type. An instance of the object design type is created, containing design data on a related aspect on a related aspect of a particular design represented by the instance.

A symbol is provided on a display which is visible to the user. The deign object is associated with a software tool that is invoked upon opening of this instance. In response to the opening of this instance, all of the data files in the file set are opened corresponding to the instance and combining the data of the data files to provide the particular design and invoking the associated software tool for communication with the data files.

USE/ADVANTAGE - Keeps track of multiple data files.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Clip Img	Ima
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☐ 12. Document ID: CA 2154951 C, EP 701220 A1, CA 2154951 A, JP 08190547 A, US 5634064 A, EP 701220 B1, DE 69521575 E

L13: Entry 12 of 14

File: DWPI

May 25, 2004

DERWENT-ACC-NO: 1996-141190
DERWENT-WEEK: 200436
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TITLE: Electronic document viewer - includes navigator which permits display of next and remaining sequential portions of article in content flow or reverse content flow order

INVENTOR: COHN, R J; MCCOY, W H ; PADGETT, A P ; WARNOCK, J E

PRIORITY-DATA: 1994US-0304680 (September 12, 1994), 1996US-0693489 (August 2, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>CA 2154951 C</u>	May 25, 2004	E	000	G06F003/14
<u>EP 701220 A1</u>	March 13, 1996	E	031	G06F017/21
<u>CA 2154951 A</u>	March 13, 1996		000	G06F003/14
<u>JP 08190547 A</u>	July 23, 1996		049	G06F017/21
<u>US 5634064 A</u>	May 27, 1997		028	G06T001/00
<u>EP 701220 B1</u>	July 4, 2001	E	000	G06F017/21
<u>DE 69521575 E</u>	August 9, 2001		000	G06F017/21

INT-CL (IPC): G06 F 3/14; G06 F 17/21; G06 F 17/24; G06 T 1/00

ABSTRACTED-PUB-NO: EP 701220A

BASIC-ABSTRACT:

The document viewer includes a computer system with digital processor, memory which provides memory storage locations accessible by the digital processor, a visual output device to provide a visual output derived, at least in part, from the digital processor, and an input device to provide an input that can be acted upon by the digital processor. A document stored in the memory includes article section information and section link information describing an ordering of the article sections such that the article sections can be accessed in a consecutive fashion.

One of a number of view modes including at least a normal view mode and an article view mode is determined. The normal view device displays a portion of the document on the visual output device in a normal view that does not require the article section information and article section link information. The article view device displays portions of a selected article in an article view, and permits the sequential viewing of consecutive article sections of the selected article based upon the section link information.

ADVANTAGE - Reader can follow thread of article in convenient, easily comprehensible fashion.

ABSTRACTED-PUB-NO:

EP 701220B EQUIVALENT-ABSTRACTS:

The document viewer includes a computer system with digital processor, memory which provides memory storage locations accessible by the digital processor, a visual output device to provide a visual output derived, at least in part, from the digital processor, and an input device to provide an input that can be acted upon by the digital processor. A document stored in the memory includes article section information and section link information describing an ordering of the article sections such that the article sections can be accessed in a consecutive fashion.

One of a number of view modes including at least a normal view mode and an article view mode is determined. The normal view device displays a portion of the document on the visual output device in a normal view that does not require the article section information and article section link information. The article view device displays portions of a selected article in an article view, and permits the sequential viewing of consecutive article sections of the selected article based upon the section link information.

ADVANTAGE - Reader can follow thread of article in convenient, easily comprehensible fashion.

US 5634064A

An electronic document viewer comprising:

a digital computer system including a digital processor, memory which includes memory storage locations accessible by said digital processor, a visual output device to generate a visual output derived, at least in part, from said digital processor, and an input device to generate an input that can be acted upon by said digital processor;

article view means implemented on said digital computer system for displaying at least a portion of a selected article on said visual output device in an article view that displays the particular appearance of said selected article defined by said predetermined final format and provides article scrolling commands for the sequential viewing of consecutive article sections of said selected article based upon said section link information, said sequential article viewing being implemented only when said view mode is said article view mode, and said sequential article sections being accessed by said user entering an article scrolling command to view a consecutive article section.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FIGMC	Draw Desc	Clip Img	Ima
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http://westbrs:9000/bin/gate.exe?f=TOC&state=dmsa06.15&ref=13&dbname=PGPB,USPT,USOC,EPAB,J... 6/16/05

The method involves providing instruction to a RIP to trap an object in a page, while the RIP is interpreting a PDL instructions comprising the object. The page is in a publication in a desktop publishing program. The publication includes a prolog and a script that specify the object to be printed.

The publication prolog is modified to instructs the RIP to create a directory of colour objects in the publication and traps the colour object using the directory. The modified publication prolog and script are then sent to the RIP.

ADVANTAGE - provides trapping capabilities to DTP programs. Provides very accurate trap placement.
ABSTRACTED-PUB-NO:

US 5666543A EQUIVALENT-ABSTRACTS:

A method in a raster image processor to trap page objects, comprising:

receiving a page prolog, comprising page description language (PDL) instructions executable by a raster image processor (RIP) to trap page objects;

receiving a page script, comprising PDL instructions describing a plurality of page objects and executable by the RIP; and

executing the prolog PDL instructions to trap an object described by the script PDL instructions.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMC	Draw Desc	Clip Img	Ima
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☐ 14. Document ID: CA 2152788 C, WO 9415307 A1, AU 9459605 A, EP 676069 A1, JP 08505723 W, US 5652876 A, EP 676069 B1, DE 69317443 E

L13: Entry 14 of 14File: DWPINov 2, 2004

DERWENT-ACC-NO: 1994-234930
DERWENT-WEEK: 200474
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TITLE: Document interchange, conversion and filing system - creates dynamic list of file formats supported by application program, identifies document and informs operating system that opening document requires no translation

INVENTOR: ASHE, D B; KLEDZIK, N G

PRIORITY-DATA: 1992US-0997688 (December 28, 1992), 1994US-0344542 (November 22, 1994), 1996US-0718119 (September 18, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
CA 2152788 C	November 2, 2004	E	000	G06F017/30
WO 9415307 A1	July 7, 1994	E	042	G06F015/20
AU 9459605 A	July 19, 1994		000	G06F015/20
EP 676069 A1	October 11, 1995	E	042	G06F015/20
JP 08505723 W	June 18, 1996		053	G06F017/21
US 5652876 A	July 29, 1997		030	G06F009/44
EP 676069 B1	March 11, 1998	E	039	G06F017/22
DE 69317443 E	April 16, 1998		000	G06F017/22

INT-CL (IPC): G06 F 9/44; G06 F 12/00; G06 F 15/20; G06 F 15/403; G06 F 17/21; G06 F 17/22; G06 F 17/30

ABSTRACTED-PUB-NO: EP 676069B

BASIC-ABSTRACT:

The system includes an operating system and at least one application. A dynamic list of file formats supported by the application is created by a processing unit. The processing unit then identifies a document, and informs the operating system that translation is not required to open the document.

The system sets up the file format conversion process and invokes translation software to perform the conversion. The system gathers information about documents and programs, uses an expert system to select and list the best options, records user selections, and reminds users of previous selections.

ADVANTAGE - Allows ergonomic file format conversion. Searches for alternative programs and translation software both locally and remotely via LAN, and allows user to select from recommended choices for opening or converting document.

ABSTRACTED-PUB-NO:

US 5652876A EQUIVALENT-ABSTRACTS:

The system includes an operating system and at least one application. A dynamic list of file formats supported by the application is created by a processing unit. The processing unit then identifies a document, and informs the operating system that translation is not required to open the document.

The system sets up the file format conversion process and invokes translation software to perform the conversion. The system gathers information about documents and programs, uses an expert system to select and list the best options, records user selections, and reminds users of previous selections.

ADVANTAGE - Allows ergonomic file format conversion. Searches for alternative programs and translation software both locally and remotely via LAN, and allows user to select from recommended choices for opening or converting document.

A method in a computer system for processing a document created previously by an application program which is not currently accessible by the computer system, comprising the steps of:

determining that the application program that created the document is not accessible by the computer system;

identifying application programs that are accessible by the computer system that are different from the application program that created the document and are capable of translating the document;

calculating translation paths from the document to the accessible application programs;

selecting one of the accessible application programs capable of translating the document; and

using the selected application program to translate the document into a format acceptable to an accessible application program.

WO 9415307A

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	Draw Desc	Clip Img	Ima
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Term	Documents
"5666543"	2
5666543S	0
((("5666543".PN.) OR 12).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	14
(L12 OR 5666543.PN.).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	14

Display Format:

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